

What is claimed is:

- 1 1. An e-commerce method for an e-commerce
- 2 system, which includes a seller's terminal, a
- 3 customer's terminal, a payment agent's terminal for
- 4 making payment in behalf of the customer's terminal
- 5 when a customer purchases a commodity from a seller,
- 6 and commodity delivery means for delivering the
- 7 commodity to a designated delivery destination, each
- 8 of these various elements of the system having a
- 9 function of communicating information with a desired
- 10 information communication network, said method
- 11 comprising the steps of:
- 12 at the customer's terminal
- 13 (a) sending an order to the seller's terminal
- 14 for a commodity via the information communication
- 15 network and designating a non-residential place
- 16 other than a residential place of the customer as
- 17 the delivery destination via the information
- 18 communication network;
- 19 at the seller's terminal
- 20 (b) notifying the customer's terminal of
- 21 transaction identification (ID) information
- 22 peculiar to said order via the information
- 23 communication network;
- 24 (c) requesting the payment agent's terminal
- 25 for payment for the commodity, for which the

26 customer's terminal made the order, using said
27 transaction ID information;
28 (d) making arrangements to deliver the
29 commodity to said non-residential place using the
30 commodity delivery means; and
31 at the commodity delivery means
32 (e) transferring the commodity to a receiver
33 for the commodity at said non-residential place.

1 2. An e-commerce method according to claim
2 1, wherein in said commodity transferring step (e),
3 certification is made as to whether the receiver
4 for the commodity is an authorized receiver, using
5 receiver certifying information, which has been
6 previously communicated between the seller and the
7 customer.

1 3. An e-commerce method according to claim
2 2, wherein:

3 in said transaction ID information notifying
4 step (b), said receiver certifying information,
5 which is created at the seller's terminal, and price
6 information of the transaction, together with said
7 transaction ID information, are notified to the
8 customer's terminal; and

9 in said payment requesting step (c), the
10 customer's terminal notifies the payment agent's

11 terminal of said transaction ID information and said
12 price information, which have been notified by said
13 seller's terminal, via the information
14 communication network as the payment request.

1 4. An electronic transaction method
2 according to claim 2, wherein in said order sending
3 step (a), the customer's terminal notifies the
4 seller's terminal of receiver certifying
5 information, which has been created by the
6 customer's terminal when the customer's terminal
7 has made said order, via the information
8 communication network.

1 5. An e-commerce method according to claim
2 2, wherein:

3 in said commodity delivering step (d), a sales
4 slip medium containing said transaction ID
5 information in the form of a read-out code
6 representing said receiver certifying information
7 is delivered to said non-residential place and is
8 attached to the commodity; and

9 in said commodity transferring step (e), the
10 receiver for the commodity is certified as the
11 authorized receiver, by reading out said transaction
12 ID information of said sales slip medium using said
13 receiver certifying information, which is known to

14 the customer's terminal, as said read-out code.

1 6. An e-commerce method according to claim
2 5, wherein:

3 in said commodity delivering step (d), said
4 transaction ID information is ciphered with said
5 read-out code as a code key; and

6 in said commodity transferring step (e), said
7 ciphered transaction ID information of said sales
8 slip medium is deciphered using said code key.

1 7. An e-commerce method according to claim 5,
2 wherein a digital signature of the authorized
3 receiver for the commodity is recorded in said sale
4 slip medium using said receiver certifying
5 information as a key for said digital signature of
6 said sales slip medium.

1 8. An e-commerce method according to claim
2 7, wherein said sales slip medium in which said
3 digital signature is recorded is delivered to the
4 seller's terminal as a reusable receipt slip by the
5 commodity delivery means.

1 9. An e-commerce method according to claim
2 2, wherein:

3 in said commodity delivering step (d), the

4 commodity is delivered to a lockable commodity
5 cabinet which is located in said non-residential
6 place and is unlocked when said receiver certifying
7 information, which is known to the customer's
8 terminal, is input with respect to said commodity
9 cabinet; and
10 in said commodity transferring step (e), said
11 transferring of the commodity is carried out as said
12 commodity cabinet is unlocked by inputting said
13 receiver certifying information, which is known to
14 the customer's terminal, with respect to said
15 commodity cabinet.

1 10. An e-commerce method according to claim
2 2, wherein said receiver certifying information is
3 biometrics data.

1 11. An e-commerce method according to claim
2 1, wherein upon completion of delivery of the
3 commodity to said non-residential place by said
4 commodity delivering step (d), the seller's terminal
5 notifies the customer's terminal of the completion
6 of delivery of the commodity via the information
7 communication network.

1 12. An e-commerce method according to claim
2 11, wherein in said commodity transferring step (e),

3 certification is made as to whether the receiver
4 for the commodity is an authorized receiver, using
5 receiver certification information, which has been
6 previously communicated between the seller and the
7 customer.

1 13. An e-commerce method according to claim
2 1, further comprising a step of notifying the
3 customer's terminal of a status of delivery of the
4 commodity in said commodity delivering step (d) by
5 making a notice on information bulletin board means
6 set up in the information communication network and
7 notified by the customer's terminal.

1 14. An e-commerce method according to claim
2 1, wherein:

3 at the customer's terminal

4 the customer makes arrangements to pay a
5 predetermined amount of money periodically to a
6 customer's account established for the payment agent
7 to make payment in behalf of the customer; and

8 at the payment agent's terminal

9 the payment agent makes a direct debit of a
10 price regarding the purchasing of the commodity in
11 said customer's account to make the payment.

1 15. An e-commerce method according to claim

2 1, wherein at the commodity delivery means, it is
3 notified to the seller's terminal via the
4 information communication network that said
5 transferring of the commodity has been carried out
6 in said commodity transferring step (e).

1 16. An e-commerce method according to claim
2 1, wherein in said order sending step (a),
3 information about the customer also is sent from
4 the customer's terminal to the seller's terminal
5 via the information communication network as
6 marketing information.

1 17. An e-commerce method according to claim
2 1, wherein upon receipt of said marketing
3 information from the customer's terminal, at the
4 seller's terminal the seller makes a discount of
5 the price of the commodity.

1 18. An e-commerce method according to claim
2 16, wherein said marketing information is age/sex
3 information of the customer.

1 19. An e-commerce method for an e-commerce
2 system which includes a seller's terminal, a
3 customer's terminal, a purchase agent's terminal
4 for making arrangements to purchase a commodity in

5 behalf of the customer's terminal, and commodity
6 delivery means for delivering the commodity to a
7 designated delivery destination, each of these
8 various elements of the system having a function
9 of communicating information with a desired
10 information communication network, said method
11 comprising the steps of:

12 at the customer's terminal

13 (a) requesting the purchase agent's terminal
14 to make arrangements to purchase a commodity via
15 the information communication network and
16 designating a non-residential place other than a
17 residential place of the customer as the delivery
18 destination via the information communication
19 network;

20 at the purchase agent's terminal

21 (b) sending, upon receipt of the commodity
22 purchase request, an order to the seller's terminal
23 for the commodity and designating said
24 non-residential place as the delivery destination,
25 via the information communication network;

26 at the seller's terminal

27 (c) notifying the purchase agent's terminal
28 of price information peculiar to said order via the
29 information communication network;

30 at the purchase agent's terminal

31 (d) making the payment of the price to the

32 seller's terminal in accordance with said price
33 information using information peculiar to said order
34 as transaction identification (ID) information;
35 at the seller's terminal
36 (e) making arrangements to deliver the
37 commodity to said non-residential place using the
38 commodity delivery means; and
39 at the commodity delivery means
40 (f) transferring the commodity to a receiver
41 for the commodity at said non-residential place.

1 20. An e-commerce method according to claim
2 19, wherein upon completion of delivery of the
3 commodity to said non-residential place by said
4 commodity delivering step (e), the purchase agent's
5 terminal notifies the customer's terminal of the
6 completion of delivery of the commodity via the
7 information communication network.

1 21. An e-commerce method according to claim
2 19, further comprising a step of notifying the
3 customer's terminal of a status of delivery of the
4 commodity in said commodity delivering step (e) by
5 making a notice on information bulletin board means
6 set up in the information communication network and
7 notified by the customer's terminal.

1 22. An e-commerce method according to claim
2 21, wherein:
3 at the customer's terminal
4 the customer makes arrangements to pay a
5 predetermined amount of money periodically to a
6 customer's account established for the payment agent
7 to make payment in behalf of the customer; and
8 at the payment agent's terminal
9 the payment agent makes a direct debit of a
10 price regarding the purchasing of the commodity in
11 said customer's account to make the payment.

1 23. An e-commerce method according to claim
2 19, wherein in said commodity transferring step (f),
3 certification is made as to whether the receiver
4 for the commodity is an authorized receiver, using
5 receiver certification information, which has been
6 previously communicated between the seller and the
7 customer.

1 24. An e-commerce method according to claim
2 23, wherein:
3 in said commodity delivering step (e), a sales
4 slip medium containing said transaction ID
5 information in the form of a read-out code
6 representing said receiver certifying information
7 is delivered to said non-residential place and is

8 attached to the commodity; and
9 in said commodity transferring step (f), the
10 receiver for the commodity is certified as the
11 authorized receiver, by reading out said transaction
12 ID information of said sales slip medium using said
13 receiver certifying information, which is known to
14 the customer's terminal, as said read-out code.

1 25. An e-commerce method according to claim
2 24, wherein:

3 in said commodity delivering step (e), said
4 transaction ID information is ciphered with said
5 read-out code as a code key; and

6 in said commodity transferring step (f), said
7 ciphered transaction ID information of said sales
8 slip medium is deciphered using said code key.

1 26. An e-commerce method according to claim
2 24, wherein a digital signature of the authorized
3 receiver for the commodity is recorded in said sale
4 slip medium using said receiver certifying
5 information as a key for said digital signature of
6 said sales slip medium.

1 27. An e-commerce method according to claim
2 26, wherein said sales slip medium in which said
3 digital signature is recorded is delivered to the

4 seller's terminal as a reusable receipt slip by the
5 commodity delivery means.

1 28. An e-commerce method according to claim
2 23, wherein:

3 in said commodity delivering step (e), the
4 commodity is delivered to a lockable commodity
5 cabinet which is located in said non-residential
6 place and is unlocked when said receiver certifying
7 information, which is known to the customer's
8 terminal, is input with respect to said commodity
9 cabinet; and

10 in said commodity transferring step (f), said
11 transferring of the commodity is carried out as said
12 commodity cabinet is unlocked by inputting said
13 receiver certifying information, which is known to
14 the customer's terminal, with respect to said
15 commodity cabinet.

1 29. An e-commerce method according to claim
2 23, wherein said receiver certifying information
3 is biometrics data.

1 30. An e-commerce method according to claim
2 19, wherein:
3 at the customer's terminal
4 the customer makes arrangements to pay a

5 predetermined amount of money periodically to a
6 customer's account established for the purchase
7 agent to make payment in behalf of the customer;
8 and

9 at the purchase agent's terminal
10 the purchase agent makes a direct debit of
11 a price regarding the purchasing of the commodity
12 in said customer's account to make the payment.

1 31. An e-commerce method according to claim
2 19, wherein at the commodity delivery means, it is
3 notified to the seller's terminal via the
4 information communication network that said
5 transferring of the commodity has been carried out
6 in said commodity transferring step (f).

1 32. An e-commerce method for an e-commerce
2 system, which includes a seller's terminal, a
3 customer's terminal, a purchase agent's terminal
4 for making arrangements to purchase a commodity in
5 behalf of the customer's terminal, a settlement
6 agent's terminal for making arrangements to settle
7 for the purchase of the commodity in behalf of the
8 customer, and commodity delivery means for
9 delivering the commodity to a designated delivery
10 destination, each of these various elements of the
11 system having a function of communicating

12 information with a desired information
13 communication network, said method comprising the
14 steps of:

15 at the customer's terminal

16 (a) requesting the purchase agent's terminal
17 to make arrangements to purchase a commodity via
18 the information communication network and
19 designating a non-residential place other than a
20 residential place of the customer as the delivery
21 destination via the information communication
22 network;

23 at the purchase agent's terminal

24 (b) sending, upon receipt of the commodity
25 purchase request, an order to the seller's terminal
26 for the commodity and designating said
27 non-residential place as the delivery destination,
28 via the information communication network;

29 at the seller's terminal

30 (c) notifying the purchase agent's terminal
31 of price information peculiar to said order via the
32 information communication network;

33 at the purchase agent's terminal

34 (d) making arrangements to pay the price to
35 the seller's terminal in accordance with said price
36 information using information peculiar to said order
37 as transaction identification (ID) information;

38 (e) requesting the settlement agent's terminal

39 for the payment in accordance with the price
40 information corresponding to the settlement
41 arrangements which the purchase agent's terminal
42 has made in behalf of the customer's terminal, via
43 the information communication network;

44 at the settlement agent's terminal

45 (f) making arrangements to pay to the purchase
46 agent's terminal the price corresponding to the
47 payment request upon receipt of the payment request
48 from the purchase agent's terminal;

49 at the seller's terminal

50 (g) making arrangements to deliver the
51 commodity to said non-residential place using the
52 commodity delivery means; and

53 at the commodity delivery means

54 (h) transferring the commodity to a receiver
55 at said non-residential place.

1 33. An e-commerce method according to claim
2 32, wherein upon completion of delivery of the
3 commodity to said non-residential place by said
4 commodity delivering step (g), the purchase agent's
5 terminal notifies the customer's terminal of the
6 completion of delivery of the commodity via the
7 information communication network.

1 34. An e-commerce method according to claim

2 32, further comprising a step of notifying the
3 customer's terminal of a status of delivery of the
4 commodity in said commodity delivering step (g) by
5 making a notice on information bulletin board means
6 set up in the information communication network and
7 notified by the customer's terminal.

1 35. An e-commerce method according to claim
2 34, wherein:

3 at the customer's terminal

4 the customer makes arrangements to pay a
5 predetermined amount of money periodically to a
6 customer's account established for the payment agent
7 to make payment in behalf of the customer; and

8 at the payment agent's terminal

9 the payment agent makes a direct debit of a
10 price regarding the purchasing of the commodity in
11 said customer's account to make the payment.

1 36. An e-commerce method according to claim
2 32, wherein in said commodity transferring step (h),
3 certification is made as to whether the receiver
4 for the commodity is an authorized receiver, using
5 receiver certification information which has been
6 previously communicated between the seller and the
7 customer.

1 37. An e-commerce method according to claim
2 36, wherein:

3 in said commodity delivering step (g), a sales
4 slip medium containing said transaction ID
5 information in the form of a read-out code
6 representing said receiver certifying information
7 is delivered to said non-residential place and is
8 attached to the commodity; and

9 in said commodity transferring step (h), the
10 receiver for the commodity is certified as the
11 authorized receiver, by reading out said transaction
12 ID information of said sales slip medium using said
13 receiver certifying information, which is known to
14 the customer's terminal, as said read-out code.

1 38. An e-commerce method according to claim
2 37, wherein:

3 in said commodity delivering step (g), said
4 transaction ID information is ciphered with said
5 read-out code as a code key; and

6 in said commodity transferring step (h), said
7 ciphered transaction ID information of said sales
8 slip medium is deciphered using said code key.

1 39. An e-commerce method according to claim 37,
2 wherein a digital signature of the authorized
3 receiver for the commodity is recorded in said sale

4 slip medium using said receiver certifying
5 information as a key for said digital signature of
6 said sales slip medium.

1 40. An e-commerce method according to claim
2 39, wherein said sales slip medium in which said
3 digital signature is recorded is delivered to the
4 seller's terminal as a reusable receipt slip by the
5 commodity delivery means.

1 41. An e-commerce method according to claim
2 36, wherein:

3 in said commodity delivering step (g), the
4 commodity is delivered to a lockable commodity
5 cabinet which is located in said non-residential
6 place and is unlocked when said receiver certifying
7 information, which is known to the customer's
8 terminal, is input with respect to said commodity
9 cabinet; and

10 in said commodity transferring step (h), said
11 transferring of the commodity is carried out as said
12 commodity cabinet is unlocked by inputting said
13 receiver certifying information, which is known to
14 the customer's terminal, with respect to said
15 commodity cabinet.

1 42. An e-commerce method according to claim

2 36, wherein said receiver certifying information
3 is biometrics data.

1 43. An e-commerce method according to claim
2 32, wherein:

3 at the customer's terminal

4 the customer makes arrangements to pay a
5 predetermined amount of money periodically to a
6 customer's account established for the purchase
7 agent to make payment in behalf of the customer;
8 and

9 at the purchase agent's terminal

10 the purchase agent makes a direct debit of
11 a price regarding the purchasing of the commodity
12 in said customer's account to make the payment.

1 44. An e-commerce method according to claim
2 32, wherein at the commodity delivery means, it is
3 notified to the seller's terminal via the
4 information communication network that said
5 transferring of the commodity has been carried out
6 in said commodity transferring step (h).

1 45. An e-commerce method for an e-commerce
2 system, which includes a seller's terminal, a
3 customer's terminal, a payment agent's terminal for
4 making arrangements to pay the price of a commodity

5 in behalf of the customer's terminal, and commodity
6 delivery means for delivering the commodity to a
7 designated destination, each of these various
8 elements of the system having a function of
9 communicating information with a desired
10 information communication network, said method
11 comprising the steps of:

12 at the customer's terminal

13 (a) requesting the payment agent's terminal
14 to make arrangements to deliver a commodity to a
15 delivery destination via the information
16 communication network and designating a
17 non-residential place other than a residential place
18 of the customer as the delivery destination via the
19 information communication network;

20 at the payment agent's terminal

21 (b) warranting the payment relating to purchase
22 between the seller's terminal and the customer's
23 terminal, which purchase is to be identified by
24 transaction identification (ID) information
25 peculiar to the delivery request, by an electronic
26 document;

27 at the commodity delivery means

28 (c) making arrangements to deliver the
29 commodity to said non-residential place after said
30 payment is warranted by said electronic document;
31 and

32 at the commodity delivery means
33 (d) transferring the commodity to a receiver
34 at said non-residential place.

1 46. An e-commerce method according to claim
2 45, wherein in said commodity transferring step (d),
3 certification is made as to whether the receiver
4 for the commodity is an authorized receiver, using
5 receiver certification information, which has been
6 previously communicated between the payment agent
7 and the customer.

1 47. An e-commerce method according to claim
2 46, wherein:

3 in said commodity delivering step (c), a sales
4 slip medium containing said transaction ID
5 information in the form of a read-out code
6 representing said receiver certifying information
7 is delivered to said non-residential place and is
8 attached to the commodity; and

9 in said commodity transferring step (d), the
10 receiver for the commodity is certified as the
11 authorized receiver, by reading out said transaction
12 ID information of said sales slip medium using said
13 receiver certifying information, which is known to
14 the customer's terminal, as said read-out code.

1 48. An e-commerce method according to claim
2 47, wherein:

3 in said commodity delivering step (c), said
4 transaction ID information is ciphered with said
5 read-out code as a code key; and

6 in said commodity transferring step (d), said
7 ciphered transaction ID information of said sales
8 slip medium is deciphered using said code key.

1 49. An e-commerce method according to clam
2 47, wherein a digital signature of the authorized
3 receiver for the commodity is recorded in said sale
4 slip medium using said receiver certifying
5 information as a key for said digital signature of
6 said sales slip medium.

1 50. An e-commerce method according to claim
2 49, wherein said sales slip medium in which said
3 digital signature is recorded is delivered to the
4 seller's terminal as a reusable receipt slip by the
5 commodity delivery means.

1 51. An e-commerce method according to claim
2 46, wherein:

3 in said commodity delivering step (c), the
4 commodity is delivered to a lockable commodity
5 cabinet which is located in said non-residential

6 place and is unlocked when said receiver certifying
7 information, which is known to the customer's
8 terminal, is input with respect to said commodity
9 cabinet; and
10 in said commodity transferring step (d), said
11 transferring of the commodity is carried out as said
12 commodity cabinet is unlocked by inputting said
13 receiver certifying information, which is known to
14 the customer's terminal, with respect to said
15 commodity cabinet.

1 52. An e-commerce method according to claim
2 46, wherein said receiver certifying information
3 is biometrics data.

1 53. An e-commerce method according to claim
2 46, wherein at the commodity delivery means, it is
3 notified to the seller's terminal via the
4 information communication network that said
5 transferring of the commodity has been carried out
6 in said commodity transferring step (d).

1 54. An e-commerce method according to claim
2 45, further comprising the step of:
3 at the payment agent's terminal
4 making arrangements to pay to the seller's
5 terminal via the information communication network

6 for the price relating to the purchase in behalf
7 of the customer's terminal when said transferring
8 of the commodity is confirmed by the payment agent's
9 terminal.

1 55. An e-commerce method according to claim
2 45, wherein at the commodity delivery means, it is
3 notified to the payment agent's terminal via the
4 information communication network that said
5 transferring of the commodity has been carried out
6 in said commodity transferring step (d).

1 56. An e-commerce method for an e-commerce
2 system, which includes a seller's terminal, a
3 customer's terminal, and commodity delivery means
4 for delivering the commodity to a designated
5 destination, each of these various elements of the
6 system having a function of communicating
7 information with a desired information
8 communication network, said method comprising the
9 steps of:

10 at the customer's terminal

11 (a) sending an order to the seller's terminal
12 for purchase of a commodity via the information
13 communication network and designating a
14 non-residential place other than a residential place
15 of the customer as the delivery destination via the

16 information communication network;
17 at the seller's terminal
18 (b) notifying transaction identification (ID)
19 information, which is peculiar to said order, to
20 the customer's terminal via the information
21 communication network;
22 (c) making arrangements to deliver the
23 commodity to said non-residential place; and
24 at the commodity delivery means
25 (d) receiving the payment by a receiver for
26 the purchase relating to said order using said
27 transaction ID information at said non-residential
28 place and transferring the commodity to said
29 receiver at said non-residential place upon receipt
30 of the payment.

1 57. An e-commerce method according to claim
2 56, wherein in said commodity transferring step (d),
3 certification is made as to whether the receiver
4 for the commodity is an authorized receiver, using
5 receiver certifying information, which has been
6 previously communicated between the seller and the
7 customer.

1 58. An e-commerce method according to claim
2 57, wherein:
3 in said commodity delivering step (c), a sales

4 slip medium containing said transaction ID
5 information in the form of a read-out code
6 representing said receiver certifying information
7 is delivered to said non-residential place and is
8 attached to the commodity; and

9 in said commodity transferring step (d), the
10 receiver for the commodity is certified as the
11 authorized receiver, by reading out said transaction
12 ID information of said sales slip medium using said
13 receiver certifying information, which is known to
14 the customer's terminal, as said read-out code.

1 59. An e-commerce method according to claim
2 58, wherein:

3 in said commodity delivering step (c), said
4 transaction ID information is ciphered with said
5 read-out code as a code key; and

6 in said commodity transferring step (d), said
7 ciphered transaction ID information of said sales
8 slip medium is deciphered using said code key.

1 60. An e-commerce method according to claim 58,
2 wherein a digital signature of the authorized
3 receiver for the commodity is recorded in said sale
4 slip medium using said receiver certifying
5 information as a key for said digital signature of
6 said sales slip medium.

1 61. An e-commerce method according to claim
2 60, wherein said sales slip medium in which said
3 digital signature is recorded is delivered to the
4 seller's terminal as a reusable receipt slip by the
5 commodity delivery means.

1 62. An e-commerce method according to claim
2 57, wherein:

3 in said commodity delivering step (c), the
4 commodity is delivered to a lockable commodity
5 cabinet which is located in said non-residential
6 place and is unlocked when said receiver certifying
7 information, which is known to the customer's
8 terminal, is input with respect to said commodity
9 cabinet; and

10 in said commodity transferring step (d), said
11 transferring of the commodity is carried out as said
12 commodity cabinet is unlocked by inputting said
13 receiver certifying information, which is known to
14 the customer's terminal, with respect to said
15 commodity cabinet.

1 63. An e-commerce method according to claim
2 57, wherein said receiver certifying information
3 is biometrics data.

1 64. An e-commerce method according to claim
2 56, wherein at the commodity delivery means, it is
3 notified to the seller's terminal via the
4 information communication network that said
5 transferring of the commodity has been carried out
6 in said commodity transferring step (d).